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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,165	06/19/2003	Charles Quentin Davis	100390-10050	9727
22852 7590 11/13/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER WRIGHT, PATRICIA KATHRYN	
			ART UNIT 1797	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/600,165	Applicant(s) DAVIS ET AL.	
	Examiner P. Kathryn Wright	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-35, 39-43 and 78-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-35, 40-43 and 78-80, 88-96 is/are rejected.
- 7) ☒ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Reply, filed September 12, 2007, is hereby acknowledged. Claims 36-38 were cancelled and claims 88-96 were added. Claims 1-35, 39-96 are currently pending. Any rejection/objection not repeated herein has been withdrawn by the Examiner.

Election/Restrictions

2. Applicant's election without traverse of Group V (claims 32-43 and 78-80) in the reply filed on September 12, 2007 is acknowledged.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

4. Claim 39 is objected to for depending on a currently cancelled claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 39 has not been considered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 32-35, 40-43, 78-80, and 88-96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 32, 78 and 89 now recite in the preamble “a fluid handling system” and in the body of the claims recite “the aspiration chamber being provided within the reagent manifold, the access port being surrounded by a reagent manifold sealing surface at an exterior surface of the fluid handling system”. Based on the construction of the claim, the aspiration chamber, plurality of reagent input lines, gas input, reagent manifold, and movable pipettor have been interpreted by the Examiner as elements which comprise the “fluid handling system”. Thus, it confusing and indefinite as to what applicant means by the limitation “reagent manifold sealing surface at an exterior surface of the fluid handling system”. Where is the exterior surface of fluid handling system? For the purposes of examination, this will be interpreted as, the “access port being surrounded by a reagent manifold sealing surface at an exterior surface of the reagent manifold.” However, correction and/or clarification respectfully requested.

Claim 78 now recites “wherein said gas input line runs perpendicular to a top surface of the fluid handling system and is provided to the access port within said fluid handling system, and said one of said plurality of reagent input lines runs perpendicular to the top surface of the fluid handling system and is provided to the access port within

Art Unit: 1797

said fluid handling system.” Again, based on the construction of the claim, the aspiration chamber, plurality of reagent input lines, gas input, reagent manifold, and movable pipettor have been interpreted by the Examiner as elements which comprise the “fluid handling system”. Thus, it confusing and indefinite as to what applicant means by the limitation gas input lines and reagents input lines running perpendicular to the “fluid handling system”. Where is the access port in the system and where is exterior surfaces of fluid handling system? For the purposes of examination, this will be interpreted as, “wherein said gas input line runs perpendicular to a top surface of the reagent manifold and is provided to the access port within said reagent manifold, and said one of said plurality of reagent input lines runs perpendicular to the top surface of the reagent manifold and is provided to the access port within said reagent manifold. However, correction and/or clarification respectfully requested.

Claims 34 recites “wherein the reagent manifold sealing surface forms a face seal when the probe is lowered into the aspiration chamber.” Similarly, claim 79, recites the sealing is accomplished through a face seal. This is confusing and indefinite since it is not clear what applicant means by a “face seal”. Furthermore, the specification does not clarify the matter.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1797

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 32-35, 40-41, 78-80, and 89-94 are rejected under 35 U.S.C. 102(b) as being anticipated by Buzza et al. (US Patent no. 4,888,998), hereinafter "Buzza".

Buzza teaches a fluid handling system for aspirating reagents. Specifically, the system includes a reagent manifold (reads on lower body 47 of cell 28) having an aspiration chamber 56 (hollow chamber in lower body of cell 28; no reference no.) with an access port being surrounded by a reagent manifold sealing surface 60 (o-ring) at an exterior surface of the reagent manifold 47. The Office considers the "exterior surface of the reagent manifold" anticipated by the surface disposed between the upper body 46 and a lower body 47 of the cell 28 (see Fig. 2). Note that the upper and lower body are removably secured by means of suitable fasteners such as screws (not shown in the view of FIG. 2). Since the upper body 46 is removable and the claim includes the transitional phrase "comprising", which is inclusive or open-ended and does not exclude additional, unrecited elements or method steps (i.e., upper body 46), the lower body 47 anticipates the reagent manifold as defined by the claims. Thus, when lower body 47 is separated from the upper body 46 the access port of the aspiration chamber 56 is surrounded by a reagent manifold sealing surface 60 (o-ring) at an exterior surface of the reagent manifold, see Fig. 2.

The aspiration chamber 56 is in communication with a plurality of fluid input lines 84, 86, 87, 88 each in selective fluid communication with the aspiration chamber 56 via independently controlled valves 96, 100, 110, 116. The fluid manifold system also a movable pipette (probe) 22 having a probe sealing surface 62, wherein the probe

Art Unit: 1797

sealing surface engages the reagent manifold sealing surface 60 when the probe is lowered into the aspiration chamber, see col. 3, line 55- col. 4, line 40 and Fig. 2 of Buzza.

Please note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed, (i.e., supply reagent or gas) fails to differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. (Emphasis added.) *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

It is the position of the Office that fluid supply lines 84, 88 could be used to supply gas and the supply lines 86 and 87 could be used to supply reagent, such that the gas input lines are arranged on the aspiration chamber above the plurality of reagent input lines, relative to the bottom surface of the chamber. Moreover, Buzza teaches a plurality of reagent sources may be used (see for example col. 5, lines 60-66.)

With respect to the method steps recited in claim 78-80, Buzza teaches moving the probe having a probe tip and a probe sealing surface into a reagent manifold, sealing the probe against the reagent manifold, and aspirating fluid from the fluid input lines after activation of a fluid line valve to fill the chamber with fluid (see col. 5, lines 22+.)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 42, 43, 95 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzza (US Patent no. 4,888,998).

The teachings of Buzza have been set forth previously, *supra*. Buzza does not explicitly state the aspiration chamber 56 has an inner dimension 25 percent larger than the outer dimension of the probe (claims 42 and 95) or that the aspiration chamber 56 has a height, which is measured from the reagent manifold sealing surface, and the probe has a length, which is measured from the probe sealing surface to a probe tip, the aspiration chamber height being substantially the same as the probe length (claims 43 and 96). However, it would have been an obvious matter of design choice to one having ordinary skill in the art at the time of the claimed invention to have made the inner dimension of the aspiration chamber 56 at least 25 percent larger than the outer

Art Unit: 1797

dimension of the probe so that the probe is not damaged during insertion into the chamber. Similarly, it would have been obvious matter of design choice to the skilled artisan at the time of the claimed invention to have made aspiration chamber height being substantially the same as the probe length so that entire length of the probe is enclosed in the chamber, which may be beneficial should the reagent manifold be used to clean the exterior surface of the probe. Furthermore, it has been held that a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Response to Arguments

12. Applicant's arguments filed September 12, 2007 have been fully considered but they are not persuasive. With respect to the previous rejection of claims 32-41, 43, and 78-80 under 35 U.S.C. 102(b) as being anticipated by Buzza, Applicant argues that according to Buzza, the O-ring seal 60 and seal 62 are formed in the interior of sample injection cell 28. Applicant allege that Buzza does not teach an "access port surrounded by a reagent manifold sealing surface at an exterior surface of the fluid handling station," as recited in claim 32 and 78 (or claims 33-41, 43, 79, and 80 that depend therefrom).

As discussed above, the Examiner points to Fig. 2 of Buzza that includes a sample injection cell 28 provided an upper and lower body (46, 47, respectively) of the cell 28. Note that the upper and lower body are removably secured by means of suitable fasteners such as screws (not shown in the view of FIG. 2). Since the upper

Art Unit: 1797

body 46 is removable and the claim includes the transitional phrase "comprising", which is inclusive or open-ended and does not exclude additional, unrecited elements or method steps, the lower body 47 anticipates the "reagent manifold" as defined by the claims. Thus, when lower body 47 is separated from the upper body 46 the access port of the aspiration chamber 56 is surrounded by a reagent manifold sealing surface 60 (o-ring) at an exterior surface of the reagent manifold, see Fig. 2. Therefore, the rejection of claims 32-41, 43, and 78-80 under 35 U.S.C. 102(b) as being anticipated by Buzza is maintained.

Regarding, the previous rejection of claim 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Buzza (US Patent no. 4,888,998), Applicant argues no *prima facie* case of obviousness has been established. Applicant alleges the Examiner has "failed to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the prior art elements in the manner claimed."

In response to Applicant's argument that there is no specific suggestion or teaching in the references to combine the prior art, the Examiner points Applicant to the court decision in *KSR International Co. v. Teleflex Inc.*, 550 U.S.-, 82 USPQ2d 1385 (2007) which forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See *Ex parte Smith*, -- USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007). Nevertheless, the Examiner contends that, contrary to Applicant's assertion, the previous rejection does clearly identify a reason why one would have modified the aspiration chamber 56 of Buzza to have an

inner dimension 25 percent larger than the outer dimension of the probe so that the probe is not damaged during insertion into the chamber.

Thus, for the reasons delineated above, the rejection of claim 42 under 35 U.S.C. 103(a) as being unpatentable over Buzza (US Patent no. 4,888,998), is maintained.

Conclusion

13. No claims allowed.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is 571-272-


Art Unit: 1797

2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 5, 2007

pkw


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